

## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Clark County Water Reclamation District  
5857 East Flamingo Road  
Las Vegas, NV 89122

**Facility:** Overton Wastewater Treatment Facility

**Permit Number:** NEV50025

**Location:** Two miles east of the town of Overton, Clark County, Nevada

Latitude: 36° 31' 54" N

Longitude: 114° 24' 59" W

Township 16 South, Range 68 East, Section 20

**Flow:** 0.35 MGD. (Daily Maximum)

**General:**

The Overton Wastewater Treatment Facility (WWTF) is operated by the Clark County Water Reclamation District (CCWRD) and serves 593 residential and 62 commercial connections. The WWTF consists of three asphalt lined primary treatment ponds (Primary A, B, C) in parallel, followed by four secondary lagoons (Secondary A, B, C & D). All six ponds are constructed with a two-inch thick layer of asphalt on the bottom and sides. The primary ponds are each 2.2 acres in size, with an operating depth of 3.2 feet. Each primary pond is aerated approximately 15 hours per day by four three-horsepower floating aerators. The primary ponds discharge to the four secondary ponds, each of which is approximately 4.4 acres in size. During winter months, the evaporation losses from the pond system does not exceed sewage input to the facility, and the effluent from the secondary ponds A through D is directed to two unlined percolation ponds (Ponds E & F) for discharge to the groundwaters of the State. The flow is limited to 350,000 gallons per day (daily maximum). Average flow during the term of the current permit is 0.183 MGD.

Wastewater is pumped from the Lewis Lane lift station to the treatment facility. All flow through the WWTF pond system is by gravity, and flow is monitored continuously with a flow meter. The primary and secondary ponds are connected such that each pond may be isolated for sludge removal and maintenance. Sludge is generally removed from the system once each year.

The groundwater at the facility is monitored via three monitoring wells. Monitoring well MW-A is up gradient of the primary ponds and wells MW-B and MW-C are down gradient of percolation ponds E and F. Per current permit stipulations, the monitoring wells are sampled quarterly for Total Dissolved Solids (TDS), Chlorides, Nitrate as N, Ammonia as N, depth to groundwater and groundwater water elevation. Nitrate as N is limited at 10.0 mg/l, and has been within permit limits during the term of the current permit.

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**Receiving Water Characteristics:**

There are no known domestic or public water supply wells within 7000 feet of the facility. The facility is not located within the 2-, 5-, or 10-year capture zones of any Wellhead Protection program. Upstream monitoring well data (MW-A) for the term of the current permit indicate receiving water quality of the following: TDS, 2379 mg/l; Chloride, 255 mg/l; Ammonia as N, 0.07 mg/l; and Nitrate, 4.08 mg/l. Average depth to groundwater varies from 81 feet upstream of the treatment facility to 30 feet and 41 feet at monitor wells MW-B and MW-C, respectively.

**Proposed Effluent and Groundwater Limitations and Monitoring Requirements**

The discharge from the facility shall be monitored and limited by the following:

| PARAMETER                | DISCHARGE LIMITATIONS | MONITORING REQUIREMENTS |                       |             |
|--------------------------|-----------------------|-------------------------|-----------------------|-------------|
|                          | Daily Maximum         | Sample Locations        | Measurement Frequency | Sample Type |
| Flow (MGD)               | 0.350                 | Influent                | Continuous            | Meter       |
| CBOD <sub>5</sub> (mg/l) | Monitor & Report      | Influent                | Quarterly             | Discrete    |
| TSS (mg/l)               | Monitor & Report      | Influent                | Quarterly             | Discrete    |
| CBOD <sub>5</sub> (mg/l) | 45                    | Effluent                | Quarterly             | Discrete    |
| TSS (mg/l)               | 90                    | Effluent                | Quarterly             | Discrete    |
| Pond Depths (feet)       | Monitor & Report      | Staff Gauges            | Quarterly             | Visual      |

- Influent flow will be measured at the main lift station prior to discharge to the aerated primary ponds.
- Influent CBOD<sub>5</sub> and TSS will be sampled prior to discharge to the primary ponds at the discharge manhole immediately upstream of the primary ponds.
- Effluent CBOD<sub>5</sub> and TSS will be sampled after the primary ponds and at a point relative to furthestmost operating ponds in the system.

The three monitoring wells, MW-A, MW-B, and MW-C, shall be monitored per the permit as follows:

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| PARAMETER                       | GROUNDWATER LIMITATIONS | MONITORING REQUIREMENTS |             |
|---------------------------------|-------------------------|-------------------------|-------------|
|                                 |                         | Frequency               | Sample Type |
| Depth to Groundwater (ft)       | Monitor & Report        | Quarterly               | Measure     |
| Groundwater Elevation (ft AMSL) | Monitor & Report        | Quarterly               | Calculate   |
| Nitrate as N (mg/l)             | Monitor & Report        | Quarterly               | Discrete    |
| Total Nitrogen as N (mg/l)      | 10.0 mg/l               | Quarterly               | Discrete    |
| Chlorides (mg/l)                | Monitor & Report        | Quarterly               | Discrete    |
| TDS (mg/l)                      | Monitor & Report        | Quarterly               | Discrete    |

**Schedule of Compliance**

The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications, which the Administrator may make in approving the schedule of compliance

- a. The permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. Within ninety (90) days of the permit issuance date, the Permittee shall submit an addendum to the Operations and Maintenance (O&M) Manual addressing the following: proper groundwater sampling procedures and quarterly vegetation removal. A copy of the O&M Manual addendum shall be submitted to both the following address and the address listed in Part I.B.2:

Mr. Nadir Sous, Supervisor  
Nevada Division of Environmental Protection  
Bureau of Water Pollution Control  
1771 E. Flamingo Road, Suite 121-A  
Las Vegas, NV 89119

- c. Within ninety (90) days of the permit issuance, the Permittee shall submit a schedule for draining, inspecting and sealing of the three primary and four secondary asphalt-lined ponds.
- d. Within ninety (90) days of the permit issuance, the Permittee shall inspect, and repair as needed, monitor well MW-C.

**Procedures for Public Comment:**

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The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** and **Moapa Valley Progress** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. **All comments must be received by NDEP by 5:00 pm, November 5, 2004.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination**

The Division has made the tentative determination to reissue the permit for a period of five (5) years, subject to effluent and monitoring limitations.

**Rationale for Permit Requirements**

The flow is measured in order to demonstrate that the flow to the treatment ponds is consistent with discharge permit flow limitations and to determine when design capacity of the WWTF is approached. Influent and effluent CBOD<sub>5</sub> and TSS are monitored to assess proper operation of the treatment ponds. The sampling of the monitoring wells is required to ensure that degradation of groundwaters of the State of Nevada does not occur.

Prepared by: Janine Hartley  
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